

INTERVIEW SUMMARY

The applicant thanks the examiner for the telephone interview held on August 31. Claims 17, 18, 22, and 24 were discussed relative to Hansen, U.S. Patent No. 4,776,061. No agreement was reached.

REMARKS

The comments of the applicant below are each preceded by related comments of the examiner (in small, bold type).

2. The disclosure is objected to because of the following informalities:

The applicants supplied Appendix C on CD-ROM in PDF format as noted on page 3 of their Remarks (applicants' page #117). However, 37 CFR 1.96(c) requires such materials to be in an ASCII format. Related ASCII formats (i.e. - most "text" (.txt) formats, Rich Text (.RTF), etc.) would suffice as alternatives. However, the Examiner does not have authority to waive the requirements of this rule and accept non-ASCII data formats. The applicant would need to file a petition under 37 CFR 1.183 to request a waiver or suspension of the rules.

The applicant filed a petition but no decision has been rendered,

The applicant will file a suitable version of Appendix C when a decision on the applicant's Petition Under 37 C.F.R. § 1.183 is rendered.

3. Claim 21 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for adding speech recognition to a computer, does not reasonably provide enablement for the details of a computer's operating system. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The "event queue" in particular is not shown in any drawing nor are any details in the specification provided about how the invention modifies the operating system as presented in claim 21.

The applicant's arguments of 19 Dec 2005 on pages 9-10 points out that claim 21 "does not state that the operating system is modified to include an event queue; it merely requires 'an operating system including an event queue.'"

However, the applicant fails to address the lack of details for an event queue. Should the Examiner interpret the argument to be an admission that event queues are obvious? If so, this would obviate the need for a rejection under 35 USC first paragraph as this limitation would then be admitted as obvious and would not require the Examiner to search for an event queue which is otherwise undefined by the applicant's specification.

Without conceding the examiner's position, claim 21 is canceled.

5. Claims 15-25 are rejected under 35 U.S.C. § 103 as being unpatentable over Hansen (4,776,016) in view of Rosenberg (Computers, Information Processing & Telecommunications, 2nd Edition, 1987) and Macintosh (Macintosh SE/30 Owner's Guide, pg III).

As per claims 15, 17, 18, 22 and 23, Hansen teaches "a voice user interface" (see his adaptable control system, abstract and figures):

"recognizing a voiced utterance" (his voice recognition systems, col. 5, line 11);

"converting said voiced utterance into a command string including a command simulating a function of said mouse" (suggested by his disclosed ability to move the cursor on the display through the use of voice commands, cursor control inputs or both. The cursor control inputs include cursor control button, the mouse, the digitizer, etc., col. 5, lines 26-33 — see also col. 6, lines 14, 42-46 and figures 1-2 — while the Hansen does not explicitly state that he is simulating a mouse function he does explicitly state that a user may use keys...to move the cursor on the computer screen .. or, if the user desires, the user may utilize voice commands via the microphone 33 to perform these functions — since he also teaches the use of a mouse as an alternative cursor control input, it would have been obvious to utilize or substitute verbal commands for similar cursor control functionality).

It is noted that Hansen does not explicitly teach "said mouse being operable to direct movement of said pointer". However, the applicant's arguments that Hansen's system is limited to MS DOS disk operating systems (col. 4, lines 10-17) is misplaced because this is only a reference to his preferred embodiment of figure 1. The Examiner relies upon his teaching of figure 2 where Hansen suggests an alternative embodiment by stating in col. 5, lines 43-45: Fig. 2 shows a modified version of the embodiment of FIG. 1 in the situation wherein the computer system includes a "mouse." One of ordinary skill in the art would have known that a computer mouse is utilized precisely for the purpose of moving a pointer. See, for example, a commonly accepted definition of the word "mouse" in 1987 by Rosenberg: a cigarette-pack size plastic box with a button on top and a cable connected to a computer. When moved on the surface of a desk, an arrow shifts on a monitor screen permitting the user to juggle words or statistics around. The "mouse" tells the computer what to do and eliminates clumsy computer commands that have to be typed with a keyboard into some personal machines. The Macintosh manual, page 111 is also used as an example showing a picture of such an arrow (applicant's claimed "pointer") and the selection of commands such as cut, copy, paste that otherwise would have required keyboard entry of words or shortcut keys. The Macintosh example show a well known computer system of 1988 that contains a mouse port such as the mouse port 27 of Hansen's Fig. 2. It would have been obvious to route a mouse and keyboard, such as those shown on the cover of the Macintosh SE/30 Owner's Guide through the invention of Hansen as shown in his FIG. 2 to achieve the desired result of allowing direct movement of a pointer because this is, by definition, what a computer mouse is designed to perform.

Without conceding the examiner's position, claims 15, 16, 18, and 25 are canceled.

Amended claim 17 requires that the conversion vary "based on a previous voiced utterance." For example, the specification discloses that "some utterance names in the [recognizable word] list link to sub-lists of other utterance names. Only the list of utterance names at a currently active level of the hierarchy can be recognized." (§ 51.) The specification further discloses that a special voiced command can be used to return the state to the root level of the hierarchy. (§ 124.) Hansen does not disclose varying a conversion based on a previous voiced utterance, nor would Hansen have made this element obvious.

Claim 22 requires that movement of an indicator "continu[e] unabated until stopped by an action of the user." Hansen discloses movement of a text cursor to a specified location on the screen by means of a voice command. (Hansen, col. 11, line 65–col. 12, line 4). Hansen further suggests using a voice command to move a text cursor in place of a cursor control key, a mouse, or a digitizer. (Hansen, col. 5, lines 27-34.) In each of these examples, after the user takes an action, movement of an indicator stops, rather than continuing unabated. Hansen does not, therefore, describe and would not have made obvious this claim limitation.

Claim 16: A "command string further comprises a command to said program" is redundant over the use of a "command" as noted under claim 15.

Claim 19: A number of text "arguments" are shown for generating commands that require more than one word in figure 10 regarding programs or commands for programs containing multiple words. Figure 14 and col. 11, line 65–col. 12 in particular show that voice commands can include multiple words such as specific x and y coordinates where it is desired to locate the cursor. Figure 14, 4th box (move the cursor ($XD=XN-X0$, $YD=YN-YO$)) shows the relative calculations for movement of the cursor that would be equivalent to the calculations necessary for relative movements of a mouse to perform the same function. This is taught as an alternative to commands such as up, down, left, right, etc. that would mimic individual keys for cursor control.

Claim 21: It is inherent that if a command is directed to the operating system, then it will particularly affect an "event queue" of the operating system. Computers require an operating system to schedule events that that must be performed and make extensive use of queues to manage the order in which the operating system will send instructions to the processor (CPU). The applicant's specification in paragraph 48 that the claimed "event queue" is "not shown" and that the Macintosh computer used by the applicant has an inherently event driven operating system. Therefore, this is considered evidence that the applicant did not invent event driven OS nor an "event queue". Arguments to the contrary should include a figure disclosing details to of an event queue along with necessary explanations and evidence showing that this is not new matter.

Claims 24, 25: See claim 15 above. A set of representations that allow “mapping from a member of said set of internal representations to a member of said set of output strings” is taught by Hansen as noted above in that he stores templates that have the mappings that indicate how each voice command will be interpreted and output (sec fig. 3, boxes 44 and 46).

In the applicant's claim 24, the internal representations are related to the set of output strings by a “multiple-to-one” mapping. For example, the specification discloses, at paragraphs 51-52, that the user may associate two different utterances with a command, such as one to save a file. In paragraph 51, the specification notes that the user may speak a command to open the file menu, followed by a command to execute the “save” menu option in the file menu. In paragraph 52, the specification states that the user may also associate a single command at the top level of the utterance hierarchy to cause the same “save” command to be executed. Thus, the specification discloses an example of a multiple-to-one mapping from a member of a set of internal representations (e.g., representations of utterances) to a member of a set of output strings (e.g., commands).

By contrast, Hansen's “templates” (Hanson, FIG. 3, refs. 44 and 46) do not correspond to a multiple-to-one mapping from a set of internal representations to a member of a set of output strings. Hansen discloses that “[e]ach template is related to a *command* which in turn also is stored as keypresses.” (Hanson, col. 7, lines 43-44.) Thus, Hansen describes a *one-to-one* mapping between templates and commands. Hansen does not disclose, for example, that more than one template could be related to a single command. Therefore, Hansen does not disclose this limitation, nor would Hanson's disclosure have made this limitation obvious.

Claim 20: It is noted that Hansen does not teach the use of “menu selection”. However, this is explicitly taught as inherent in many computers available since 1888 as shown in the Macintosh reference on page 111 where the definition of menu indicates that it is inherently A list of commands that appears when you point to and press the menu title in the menu bar. Dragging through the menu and releasing the mouse button while a command is highlighted chooses that command. Therefore, it would have been obvious to one of ordinary skill in the computer arts to use the voice control system of Hansen in a computer that has inherent menu selection capabilities because Macintosh teaches menu selection is an obvious combination that modern software will allow computers to perform if they are normally operated in combination with a mouse.

Claim 20 is patentable for at least the same reasons as claim 18, from which it depends.

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Page : 8 of 8

Attorney's Docket No.: 10591-003009

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.


Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Enclosed is a \$1,020.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, reference 10591-003009.

Respectfully submitted,

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